

## REMARKS

This is intended as a full and complete response to the Office Action dated November 15, 2007, having a shortened statutory period for response set to expire on February 15, 2008.

In amended Figure 1, PRIOR ART legend has been added at the request of the Examiner.

Claims 1-7, 11-14, 17 and 19-20 are indicated to be allowable by the Examiner. Claim 9 has been amended to include the limitations of the base claim and all intervening claims to place the claim in condition for allowance. Claim 13 has been amended for clarity. Applicants believe no new matter has been introduced by the amendments presented herein. The amendments have been made to put the claims in condition for allowance.

Claims 8, 10, 15-16 and 18 have been cancelled without prejudice. Applicants reserve the right to subsequently take up prosecution of the claims as originally filed in this application in a continuation, a continuation-in-part and/or a divisional application. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 14, 22 and 28 of copending Application No. 10/531,000, which now issued as US Patent No. 7,328,108. The Examiner states that although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are merely broader in that they do not specify that the processing is done in the common shot domain.

In response, a terminal disclaimer is filed herewith to cure the obviousness-type double patenting rejection. This filing of a terminal disclaimer in response to the obviousness-type double patenting rejection is not a concession that the obviousness determination is correct, but merely a procedural mechanism to obtain issuance of the patent. Applicants therefore respectfully request that the rejection be withdrawn.

The Examiner takes the position that Figure 1 should be designated with a legend PRIOR ART. Accordingly, Figure 1 has been amended to include the PRIOR ART legend. A replacement sheet that includes Figure 1 is provided herewith.

Claim 13 is objected to for reciting “defining in any”. The Examiner takes the position that it should recite “defining in”. Accordingly, claim 13 has been amended to recite “defining in”. Withdrawal of the objection is respectfully requested.

Claims 8-9 stand rejected under 35 U.S.C. § 112. Claim 8 has been cancelled without prejudice, thereby rendering this rejection moot with respect to claim 8. As to claim 9, the Examiner takes the position that claim 1, upon which claim 9 depends, recites “selecting a first portion of the seismic data containing only events arising from critical refraction of seismic energy” while claim 9 recites “that the seismic data contains substantially only critical refraction events.” The Examiner states that the phrase “substantially only” is broader than “only”. Applicants respectfully traverse this rejection. Contrary to the Examiner’s position, claim 9 does not depend from claim 1. Rather, claim 1 depends from claim 8. Accordingly, withdrawal of the rejection is respectfully requested.

Claims 10 and 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Application of Two-Step Decomposition to Multi-Component Ocean Bottom Data: Theory and Case Study by K. M. Schalkwijk et al, J. Seism. Expl. Vol. 8 pp 261-278 (1999) (“Schalkwijk”). Claims 10 and 15 have been cancelled without prejudice, thereby rendering the rejection moot with respect to these claims. Withdrawal of the rejection is respectfully requested.

Claims 8, 16 and 18 stand rejected under 35 USC § 103(a) as being unpatentable over US Patent No. 6,574,563 in view of US Patent No. 6,101,448. Claims 8, 16 and 18 have been cancelled without prejudice, thereby rendering the rejection moot with respect to these claims. Withdrawal of the rejection is respectfully requested.

Claims 1-7, 11-14, 17 and 19-20 are indicated to be allowable by the Examiner. Applicants would like to thank the Examiner for allowing these claims.

Claim 9 is objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form to include all the limitations of the base

claim and any intervening claims. Accordingly, claim 9 has been amended to include the limitations of the base claim and all intervening claims to place the claim in condition for allowance.

In conclusion, the references cited by the Examiner, neither alone nor in combination, teach, show, or suggest the claimed invention. Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

The prior art made of record is noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the office action. Therefore, it is believed that a detailed discussion of the secondary references is not deemed necessary for a full and complete response to this office action. Accordingly, allowance of the claims is respectfully requested.

Respectfully submitted,

/Ari Pramudji/      Date: February 14, 2008

Ari Pramudji  
Registration No. 45,022  
Pramudji Wendt & Tran, LLP  
1800 Bering, Suite 540  
Houston, Texas 77057  
Telephone: (713) 468-4600  
Facsimile: (713) 980-9882  
Attorney for Assignee